

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,465	04/24/2001	Seth Haberman	20429/9-C	5373
7590 09/30/2005			EXAMINER	
Brown, Rudnick, Freed & Gesmer			PARRY, CHRISTOPHER L	
<del>-</del>	One Financial Center Boston, MA 02111		ART UNIT	PAPER NUMBER
,			2614	
			DATE MAILED: 09/30/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/841,465	HABERMAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Chris Parry	2614				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value of the provision of the prov	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timularly and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	L. lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24 Ap	Responsive to communication(s) filed on <u>24 April 2001</u> .					
	•					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-21 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-21 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	vn from consideration.					
Application Papers						
9)⊠ The specification is objected to by the Examine 10)⊠ The drawing(s) filed on 11 September 2001 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)□ The oath or declaration is objected to by the Ex	are: a) $\square$ accepted or b) $\boxtimes$ objection of a section about a section is required if the drawing(s) is objection is required if the drawing(s) is objection.	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/25/02, 7/28/03. W/14/03	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Application/Control Number: 09/841,465 Page 2

Art Unit: 2614

#### **DETAILED ACTION**

#### Drawings

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference characters "52" and "54" with regards to figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: With regards to figure 8, reference character "76" and with regards to figure 10, reference character "140". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "60" has been used to designate both TV and Output Data Stream. Also, reference character "58" has been used to designate both STB and Resulting Data Stream. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Specification

4. The disclosure is objected to because of the following informalities: On page 4, line 2; "thee" should be replaced with --the--. On page 15, lines 8 and 12, "overlayed" should be replaced with --overlaid--.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-7, 9-13, 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Picco et al. "Picco" (US 6,029,045).

Regarding Claim 1, Picco teaches a system used to dynamically insert commercials to an audience of viewers based on viewer profiles. Picco teaches "creating a personalized message template comprising a plurality of slots in sequence" by disclosing in figure 2, television signals 70 divide programming 72 into a plurality of segments, separated by local content space 74. Programming is divided by content spaces that allow insertion of advertisements or commercial breaks. Picco teaches "wherein at least one of said slots can include one of a plurality of different segments, with all segments for a particular slot being a same length" as seen in figure 4, database structure 146 stores a plurality of advertising segments that may be inserted into local content spaces 74 (Col. 6, lines 59-61). Picco teaches, "providing a plurality of data streams to a receiving unit" by disclosing set-top box 120 as shown in figure 3. Picco teaches "each data stream delivering a different one of said plurality of segments for said at least one slots" as seen in figure 4, database structure 146 stores a plurality of

advertising segments and scheduler 148 is used to determine what local content should be presented to live feeds (Col. 7, lines 2-25). Picco teaches "wherein said segments are synchronized to begin and end at substantially the same time" is met by the use of using an appropriate piece of content or advertisement is selected based on size of space in the programming stream, and the data stream may be reformatted to accept it (Col. 11, lines 4-9). Picco teaches "providing content selection information regarding content of said plurality of data streams to said receiving unit" is met by each piece of local content downloaded to the set-top box may have an associated content profile (Col. 7, lines 55-56). The pieces of local content downloaded to the set-top box may have a plurality of different content profiles and only pieces of local content with content profiles that match some predetermined criteria stored in the set-top box are stored in the set-top box (Col. 8, lines 11-16). Picco teaches "information including switch times for said plurality of synchronized segments, to allow said receiving unit to select among said plurality of data streams for one of said segments for said particular slot, to assemble a personalized message" is met by combiner [110] which combines a plurality of user-specific information in the satellite signal including a private data identification code that permits the set-top box in accordance with the invention to locate the private data being transmitted through the satellite (Col 8, lines 23-28). The private data may include command and control data that instructs the processor within the set-top box how to insert the local content into the satellite data streams (Col. 8, lines 36-39).

As for Claim 2, Picco teaches "receiving unit selects among said plurality of data streams in real time" as taught in column 10, lines 52-67 and column 11, lines 1-9 when

Application/Control Number: 09/841,465

Art Unit: 2614

controlling the splicer, the set-top box may determine the appropriate piece of local content to be inserted into the live feed based on the size of the space in the programming data stream and control the reformatting of the compressed digital data streams by the splicer in order to correctly insert the local content into the live feed.

As for Claim 3, Picco teaches "wherein said personalized message is viewed by a viewer as it is assembled" is met by selecting a local content advertisement during a live feed, immediately before presentation, to display to viewers. As seen in figure 10, while programming data 252 is being displayed if a local content space is discovered, an advertisement is selected and spliced into programming data at step 258.

As for Claim 4, Picco teaches "wherein said receiving unit selects among said plurality of data streams based on said content selection information and information about a viewer who will view said personalized message" as taught in column 12, lines 37-52 a plurality of pieces of local content individualized to the user of a particular settop box is provided so that the local content may be targeted to a particular type of user.

As for Claim 5, Picco teaches "providing a data stream with a default personalized message to allow said receiving unit to display said default personalized message without selecting between said plurality of data streams" is met by each piece of local content downloaded to the set-top box may have an associated content profile. The content profile may include a distribution variable which determines which users of the system may be downloaded so that while local content targeted for a particular household will be received by each set-top box, it will only be stored by the set-top box in the one or more households targeted. The distribution variable may have a value, for

example, indicating that all households should store the local content (i.e., "ALL") (Col. 7, lines 55-64).

As for Claim 6, Picco teaches "wherein said plurality of data streams are MPEG encoded data streams" as taught in column 1, lines 66-67 and column 2, lines 1-6 some conventional cable and satellite-based television systems and most future systems are going to be transmitting their television signals in a digital compressed data format in order to make more efficient use of the bandwidth of the cable or the satellite system. The data is typically compressed using the Motion Pictures Experts Group (MPEG) format due to the high compression rates which reduce the bandwidth required to transmit the data. The examiner notes that it is well known in the art to use MPEG encoded streams in digital video distribution systems.

As for Claim 7, Picco teaches "wherein said plurality of data streams are multiplexed into a transport stream" as seen in figure 5, multiplexer 140 combines live feeds 106 with a plurality of local content 108 to form a single transport stream.

As for Claim 9, Picco teaches, "wherein said receiving unit is a set top box" by set-top box 120 as seen in figure 3.

As for Claim 10, Picco teaches "wherein said set top box can receive both analog data streams and digital data streams" as taught in column 14, lines 62-67 the system may be used with a cable-based digital data broadcast system, a satellite or cable-based analog data broadcast system, a digital data broadcast system that uses a computer network, such as the Internet, a wireless cable (i.e., microwave) broadcast system, or a terrestrial broadcast system to communicate the digital data to the viewer.

Application/Control Number: 09/841,465

Art Unit: 2614

Picco teaches "wherein said set top box momentarily switches from an analog data stream to a digital data stream to play out a personalized message" as seen in figure 11, a user can switch from receiving analog cable or satellite data broadcast and receive digital data broadcast by using the Internet (Col. 14, lines 17-41).

As for Claim 11, Picco teaches "wherein said set top box switches from an analog data stream to a digital data stream triggered by VBI data" as taught in column 5, lines 49-54 within each PID, there is a television signal 70 that includes a data stream 72 containing the television programming data and a local content space 74. The local content space is typically a blank spot or "VBI data" in the data stream where an operator of the satellite system may add local content [74] into the data stream.

As for Claim 12, Picco teaches "wherein said set top box momentarily switches from a first digital data stream to a second digital data stream to play out a personalized message" as seen in figure 10, set-top box 120 receives digital satellite broadcast and if local content is to be inserted, CPU 188 selects local content, based on user preferences, stored on disk 186 and provides local digital content to audio/video splicers.

As for Claim 13, Picco teaches "wherein said set top box receives a plurality of television channels over said data streams" as taught in column 6, lines 19-23 the receiver 116 includes a receiving antenna 118 and a set-top box 120. The antenna receives the satellite signal which is digital and the set-top box processes the digital signal in order to display a selected channel on a television receiver 122. Picco teaches "said channels include programs including a synchronized commercial break" as seen in

figure 2, the local content space [74] is typically a blank spot in data stream [70] where an operator of the satellite system may add local content into data stream [70] during programming [72] (column 5, lines 52-54). Picco teaches "during said synchronized commercial break; said data streams deliver segments to create a personalized message for display irrespective of which channel said set top box had selected" as seen in figure 10, where programming data [72] is displayed and if a local content space [74] is located, local content [74] from disk [186] is inserted into the data stream [70].

Page 9

As for Claim 15, Picco teaches "further including a plurality of templates for creating said personalized messages, wherein said templates include video sequence templates and audio sequence templates" as taught in column 11, lines 49-51 each splicer inserts selected pieces of local content into the video and audio data streams. The splicers are controlled by the CPU 188. Therefore, audio and video can be separately inserted into the data stream.

Regarding Claim 16, Picco teaches "a personalized message template comprising a plurality of slots in sequence" by disclosing in figure 2, television signals 70 divide programming 72 into a plurality of segments, separated by local content space 74. Programming is divided by content spaces that allow insertion of advertisements or commercial breaks. Picco teaches "a plurality of media segments for said slots, wherein at least one of said slots can include one of a plurality of different media segments, with all media segments for a particular slot being a same length" as seen in figure 4, database structure 146 stores a plurality of advertising segments that may be inserted into local content spaces 74 (Col. 6, lines 59-61). Picco teaches, "a plurality of data

streams transmitting said media segments" as seen in figure 5, a plurality of local content streams 108. Picco teaches "wherein said plurality of data streams transmit all media segments for one of said slots in at a same time" as seen in figure 5, live feeds 106 and local content streams 108 are multiplexed by the multiplexer 140 into a single digital data stream that is transmitted to the user. Picco teaches "wherein one of said data streams transmits content selection information regarding content of said plurality of data streams said information including switch times for allowing a receiving unit to switch among said plurality of data streams to select a particular media segment at a particular time, to assemble said personalized message" is met by the combiner [110] which may combine a plurality of user-specific information in the satellite signal including a private data identification code that permits the set-top box in accordance with the invention to locate the private data being transmitted through the satellite (Col 8, lines 23-28). The private data may include command and control data that instructs the processor within the set-top box how to insert the local content into the satellite data streams (Col. 8, lines 36-39).

As for Claim 17, Picco teaches "wherein said receiving unit switches between analog data streams and digital data streams to assemble said personalized message" as taught in column 14, lines 62-67 the system may be used with a cable-based digital data broadcast system, a satellite or cable-based analog data broadcast system, a digital data broadcast system that uses a computer network, such as the Internet, a wireless cable (i.e., microwave) broadcast system, or a terrestrial broadcast system to communicate the digital data to the viewer. As taught by figure 10, when the set-top box

120 receives a satellite or cable-based analog data broadcast, can switch from programming [72] to digital local content [74]. Therefore, the set-top box can receive an analog data broadcast [70] and insert digital local content [74] into blank spots in the broadcast designated for local content [74].

As for Claim 18, Picco teaches "wherein said receiving unit switches between a first digital data stream to at least one second digital data stream to assemble said personalized message" as seen in figure 10, set-top box 120 or "receiving unit" receives digital satellite broadcast and if local content is to be inserted, CPU 188 selects local content, based on user preferences, stored on disk 186 and provides local content [74] to audio/video splicers for display.

Regarding Claim 19, Picco teaches "a means for creating a personalized message template with plurality of slots" by disclosing in figure 2, television signals 70 divide programming 72 into a plurality of segments, separated by local content space 74. Programming is divided by content spaces that allow insertion of advertisements or commercial breaks. Picco teaches "a means for creating a plurality of media segments, said media segments for use in said slots" as seen in figure 4, database structure 146 stores a plurality of advertising segments that may be inserted into local content spaces 74 (Col. 6, lines 59-61). Picco teaches "a transmission means for transmitting said media segments, wherein said media segments for a particular slot in said personalized message are transmitted at a same time" as seen in figure 4, local content streams 108 are multiplexed with live feeds 106 into a single transport stream transmitted to transmitter 144 which uses satellite 104 to deliver signal to set-top box 120. Picco

teaches "a means for providing content information to allow a receiving unit to select one of said media segments at a particular time, to assemble said personalized message" is met by the combiner [110]. Combiner 110 may combine a plurality of user-specific information in the satellite signal including a private data identification code that permits the set-top box in accordance with the invention to locate the private data being transmitted through the satellite (Col 8, lines 23-28). The private data may include command and control data that instructs the processor within the set-top box how to insert the local content into the satellite data streams (Col. 8, lines 36-39).

7. Claims 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ngo et al. "Ngo" (US 6,574,793).

Regarding Claim 20, Ngo teaches, "creating a plurality of different media segments" as shown in figure 2, advertisement 20 is provided with three variations by variants 24, 26, and 28. Ngo teaches "wherein said different media segments include incomplete sections of a complete message" by disclosing a viewer has the option of seeing the same advertisement, with the car model in different colors with the colors being the different variations or "incomplete parts" of the advertisement (Col. 5, lines 25-39). Ngo teaches, "wherein at least one subset of said media segments are a same length" as shown in figure 2 by ad variations 24, 26, and 28. Ngo teaches "transmitting said plurality of different media segments to a television signal receiver" as shown in figure 3, the advertisements are preferably displayed on a television connected to a network system such as cable network system 30 (Col. 3, lines 43-45). System 30 includes an operations center 32 where control information is assembled in the form of

digital data, a digital compression system where the digital data is compressed, combined, multiplexed, encoded, and mapped into digital signals for satellite 34 transmission to a headend system 36 and a plurality of in home set top boxes 38, or other suitable receivers, operable to decompress the digital data and display the advertisement for a viewer (Col. 3, lines 45-53). Ngo teaches "wherein all media segments in said at least one subset are transmitted simultaneously" is taught in column 4, lines 30-37 if the signals are analog, then three separate advertisements are provided to the set-top box 38 (e.g., three separate video streams) (FIG. 2). If the signals are digital, then the advertisements 24, 26, 28 are variants of one another. Ngo teaches "directing said television signal receiver to switch to one of said media segments in said subset as said media segments in said subset are received" as taught in column 4, lines 18-20 the viewer may move a pointer over an up icon 56 on screen 44 to go to the next advertisement or a down icon 58 to go to the previous advertisement.

Regarding Claim 21, Ngo teaches, "creating a plurality of different media segments" as shown in figure 2, advertisement 20 is provided with three variations by variants 24, 26, and 28. Ngo teaches "wherein said different media segments include incomplete sections of a complete message" by disclosing a viewer has the option of seeing the same advertisement, with the car model in different colors with the colors being the different variations or "incomplete parts" of the advertisement (Col. 5, lines 25-39). Ngo teaches, "wherein at least one subset of said media segments are a same length" as shown in figure 2 by ad variations 24, 26, and 28. Ngo teaches, "transmitting a plurality of television programs to a television signal receiver" as shown in figure 3, the

advertisements are preferably displayed on a television connected to a network system such as cable network system 30 (Col. 3, lines 43-45). System 30 includes an operations center 32 where control information is assembled in the form of digital data, a digital compression system where the digital data is compressed, combined, multiplexed, encoded, and mapped into digital signals for satellite 34 transmission to a headend system 36 and a plurality of in home set top boxes 38, or other suitable receivers, operable to decompress the digital data and display the advertisement for a viewer (Col. 3, lines 45-53). Ngo teaches, "wherein said plurality of television programs have at least one synchronized commercial break" as shown in figure 2, system 20 provides two or more advertisements during a break in television programming 22. Ngo teaches "during said synchronized commercial break, transmitting said plurality of different media segments to said television signal receiver" as shown in figure 3, set-top box [38] downloads ads from satellite [34] and during commercial breaks, displays ads on television [45] matching stored profile in set-top box [38] (Col. 7, lines 19-35). Ngo teaches "wherein all media segments in said at least one subset are transmitted simultaneously" is taught in column 4, lines 30-37 if the signals are analog, then three separate advertisements are provided to the set-top box 38 (e.g., three separate video streams) (FIG. 2). If the signals are digital, then the advertisements 24, 26, 28 are variants of one another. Ngo teaches "directing said television signal receiver to switch to one of said media segments in said subset as said media segments in said subset are received" as taught in column 4, lines 18-20 the viewer may move a pointer over an up icon 56 on screen 44 to go to the next advertisement or a down icon 58 to go to the

Application/Control Number: 09/841,465 Page 15

Art Unit: 2614

previous advertisement. Ngo teaches "wherein after said synchronized commercial break, said television signal receiver switches to a previously selected television program" as shown in figure 2 as program 22 is interrupted by commercial break and provided with advertisements 24, 26, 28 and the system returns to program 22 after commercial break.

#### Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Picco in view of Ngo.

With respects to Claim 8, Picco fails to teach segments comprising incomplete parts of a personalized message. In a related art pertaining to video distribution, Ngo teaches a system where an advertisement has three variants by disclosing a viewer has the option of seeing the same car advertisement, with the car model shown in different colors with the colors being the different variations or "incomplete parts" of the advertisement (Col. 5, lines 25-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco with the teachings of Ngo in order to facilitate segments comprising incomplete parts of a personalized message to provide the viewer with an advertisement that will be of interest (Ngo – Background).

Application/Control Number: 09/841,465 Page 16

Art Unit: 2614

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Picco in view Kunkel et al. "Kunkel" (US 2002/0056093).

With respects to Claim 14, Picco is silent on including transition segments, which are inserted into said personalized message between said segments. In a related art pertaining to video distribution, Kunkel teaches the use of sending I-frames continuously at the beginning of each targeted ad, so that the set top box tuners can quickly acquire the signal. Similarly, a continuous stream of I-frames is provided for the last few seconds of the default advertisement to enable the tuners to quickly reacquire the original channel once the targeted advertisement has concluded (page 4, ¶ 31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco with the teachings of Kunkel in order to facilitate providing transition segments, which are inserted into personalized message between segments for the benefit of facilitating seamless transitions between advertisements and original programming (Kunkel - ¶ 31).

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to systems and methods of providing customized advertisements based on demographics or user profiles.

U.S. Pat. No. 6,698,020 to Zigmond et al.

U.S. Pat. No. 5,652,615 to Bryant et al.

Application/Control Number: 09/841,465

Art Unit: 2614

U.S. Pat. No. 6,671,880 to Shah-Nazaroff et al.

U.S. Pub. No. 2002/0083443 to Eldering et al.

U.S. Pub. No. 2004/0111742 to Hendricks et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Parry whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:30 AM to 4:30 PM.

Page 17

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Initials:

September 21, 2005